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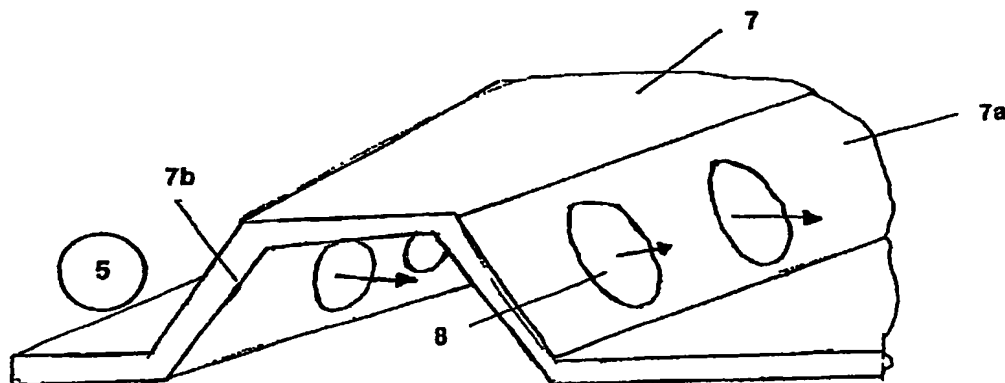
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(54) Title: ELECTROCHEMICAL SYSTEM



(57) Abstract: The invention deals with an electrochemical system for compressing gases and/or for producing gases by electrolysis, consisting of an electrochemical compressor stack (1) having layering of several electrochemical cells, which are separated from one another in each case by bipolar plates (3; 3'), wherein the bipolar plates have openings for media supply and media discharge (5a, 5b) for the electrochemical cells and the electrochemical cell stack can be placed under mechanical compressive strain in direction (6) of the layering. The bead arrangements (7; 7') are resilient and are provided at least in some regions to seal the openings (4, 5a, 5b) and/or an electrochemically active region (10) of the electrochemical cells.

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# INTERNATIONAL SEARCH REPORT

International Application No.

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According to International Patent Classification (IPC) or to both national classification and IPC

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

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## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>WO 02/069416 A (CHEN COLIN CHING-HO ; POPIELAS FRANK WALTER (US); DANA CORP (US); SHAH) 6 September 2002 (2002-09-06)</p> <p>the whole document</p> <p style="text-align: center;">----- -/--</p>	<p>1-6, 9-11, 13-15, 18-20, 22, 24, 26-29, 31, 33, 34, 37-41</p>



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>US 3 320 092 A (ULINE LAWRENCE J) 16 May 1967 (1967-05-16)</p> <p>column 2, line 47 - column 3, line 20; figures 2-4</p>	<p>1-4, 6, 9-11, 13-15, 18-22, 24-31, 33, 34, 36-41</p>
X	<p>EP 0 408 104 A (STICHTING ENERGIE) 16 January 1991 (1991-01-16)</p> <p>figures 3, 4</p>	<p>1, 2, 6-10, 13, 14, 18-20, 22-29, 31-36, 39-42</p>
X	<p>WO 01/48845 A (EMITEC EMISSIONSTECHNIK ; KONIECZNY JOERG ROMAN (DE); POPPINGER MANFRE) 5 July 2001 (2001-07-05) figure 5</p>	<p>1, 27, 28, 41</p>
X	<p>US 3 012 086 A (VAHIDICEK NATHAN P) 5 December 1961 (1961-12-05) claims 10, 11</p>	<p>1, 27, 28, 41</p>
X	<p>PATENT ABSTRACTS OF JAPAN vol. 2000, no. 05, 14 September 2000 (2000-09-14) &amp; JP 2000 048835 A (NOK CORP), 18 February 2000 (2000-02-18) abstract</p>	<p>1, 27, 28, 41</p>

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